#### IN I EDINAL IONAL SEADOR REFURI

International Application No. PCT/US2004 /042455

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G01N29/02 B01L3/00

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) GOIN BOIL A61M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

Category °	NTS CONSIDERED TO BE RELEVANT  Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
x .	US 6 156 270 A (BUECHLER ET AL) 5 December 2000 (2000-12-05) column 2, lines 6-12 figure 1 column 7, lines 1-53 column 8, line 45 - column 9, line 7 column 14, line 20 - column 21, line 24 column 23, lines 6-36; examples 5,6	1-10,21, 22
<b>X</b>	US 4 233 029 A (COLUMBUS ET AL) 11 November 1980 (1980-11-11) the whole document	 1-10,21, 22
	-/	

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents:  A document defining the general state of the art which is not considered to be of particular relevance  E earlier document but published on or after the international filling date  L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  O document referring to an oral disclosure, use, exhibition or other means  P document published prior to the international filling date but later than the priority date claimed	<ul> <li>*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>*&amp;* document member of the same patent family</li> </ul>
Date of the actual completion of the international search 23 August 2005	Date of mailing of the international search report  0 1 09, 2005
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016	Authorized officer Tiede, R

### INTERNATIONAL SEARCH REPORT

International Application No. PCT/US2004 /042455

		PC170320047042455
	ntion) DOCUMENTS CONSIDERED TO BE RELEVANT	Relevant to claim No.
Category °	Cliation of document, with indication, where appropriate, of the relevant passages	, in the second
X	US 6 656 428 B1 (CLARK DAVID D ET AL) 2 December 2003 (2003-12-02) column 5, line 10 - column 6, line 47 column 7, lines 1-22 column 7, line 39 - column 10, line 56 column 13, line 20 - column 14, line 29 column 17, lines 11-22 column 26, line 49 - column 27, line 23; figures 1-6	18
X	GB 1 130 593 A (NOVO TERAPEUTISK LABORATORIUM A/S) 16 October 1968 (1968-10-16)	27-34 37
Υ	page 4, line 3 - page 5, line 94; figures 1-4	
X	WO 02/088296 A (BOSTON BIOMEDICA, INC; SCHUMACHER, RICHARD, T; TAO, FENG; LAWRENCE, NA) 7 November 2002 (2002-11-07)	27,35, 36,38,39
Υ	page 21, line 10 - page 22, line 15; figures 16a,b	37
<b>X</b>	FR 2 612 297 A (PASTEUR DIAGNOSTICS) 16 September 1988 (1988-09-16) page 15, line 9 - page 16, line 28; figures 21,23a-f	35-40

# INTERNATIONAL SEARCH REPORT

International Application No. PCT/US2004 /042455

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:  1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
· · · · · · · · · · · · · · · · · · ·
<ol> <li>Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:</li> </ol>
an extent that no meaningful international Search curred say, 42
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. X As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
1-10,18,22,27-40
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the Invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.

### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1, 21 (part); 2-10, 22

A detection cartridge and method of use comprising a housing, a sensor, a detection chamber with a flow front control feature, and a waste chamber and details about said flow front control means, solving the problem to find alternative embodiments for flow front control means

2. claims: 1 and 21 (part); 11-15, 17, 23-26

A detection cartridge and method of use comprising a housing, a sensor, a detection chamber with a flow front control feature, and a waste chamber and details about said waste chamber, solving the problem to allow waste collection after the liquid passed the detection chamber

3. claims: 1, 21 (part); 16

A detection cartridge and method of use comprising a housing, a sensor, a detection chamber with a flow front control feature, and a waste chamber and a fluid monitor, solving the problem to monitor the fluid flow

4. claims: 18,27-40

A module comprising a housing, an exit seal, a chamber, a plunger, and an input port and a method to use said module

# INTERNATIONAL SEARCH REPURT

Information on patent family members

International Application No.
PCT/US2004 /042455

				1017002	2004 7042433
Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 6156270	A	00 11 1000	USS AU ACE DEP PP SOUS SOUS AU ACE DE PP PP WO WAT ACE DEP PP DO WOOD OF THE PP PP WO	6019944 A 5885527 A 5458852 A 242054 T 6579098 A 2284801 A1 69815365 D1 69815365 T2 1019193 A2 3531941 B2 2001526778 T 2005136552 A1 9843739 A2 2004077103 A1 2005112782 A1 6767510 B1 6271040 B1 2002086436 A1 6143576 A 219967 T 4596593 A 2113198 A1 2469307 A1 69332072 D1 69332072 D1 69332072 T2 1175940 A1 0596104 A1 3451088 B2 6509424 T 9324231 A1	01-02-2000 23-03-1999 17-10-1995 15-06-2003 22-10-1998 08-10-1998 10-07-2003 19-08-2004 19-07-2000 31-05-2004 18-12-2001 23-06-2005 08-10-1998 22-04-2004 26-05-2005 27-07-2004 07-08-2001 04-07-2002 07-11-2000 15-07-2002 30-12-1993 09-12-1993 09-12-1993 08-08-2002 24-10-2002 31-05-1994 29-09-2003 20-10-1994 09-12-1993
US 4233029 US 6656428	A B1	11-11-1980	AT CA CA CE DE EP JP	4249 T 1366 T 1119831 A1 1129498 A1 1133059 A1 2963436 D1 2964110 D1 2965945 D1 0014797 A1 0010456 A1 0010457 A1 1196515 C 55059326 A 58026968 B 55074462 A 1248146 C 55071942 A 59021501 B 6524100 A 1556922 A 1250602 A2 2004505231 T 517158 B	15-08-1983 15-08-1982 16-03-1982 10-08-1982 05-10-1982 16-09-1982 30-12-1982 25-08-1983 03-09-1980 30-04-1980 30-04-1980 21-03-1984 02-05-1980 06-06-1983 05-06-1980 16-01-1985 30-05-1980 21-05-1984 
 GB 1130593	A	 16-10-1968	WO	0111374 A2 106395 C	15-02-2001  30-01-1967

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.
PCT/US2004 /042455

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
GB 1130593	A		AT BE CH DE FR NL SE	257824 B 680328 A 440560 A 1491785 A1 1478062 A 6605743 A 324209 B	25-10-1967 31-10-1966 31-07-1967 09-10-1969 21-04-1967 31-10-1966 25-05-1970
WO 02088296	Α	07-11-2002	CA EP JP WO US	2445587 A1 1390466 A1 2004536292 T 02088296 A1 2002197631 A1	07-11-2002 25-02-2004 02-12-2004 07-11-2002 26-12-2002
FR 2612297	A	16-09-1988	FR	2612297 A1	16-09-1988